CLAIMS FOR US

- 1. A polynucleotide selected from the group consisting of:
- (a) a polynucleotide encoding a protein having the amino acid sequence of SEQ ID NO 38, or a polynucleotide variant thereof encoding a modified amino acid sequence having at least one deletion, addition, substitution or alteration, said variant polynucleotide being suitable for use in accelerating the biosynthesis of ML-236B; and
- (b) a polynucleotide encoding a protein having the amino acid sequence of SEQ ID NO 42, or a polynucleotide variant thereof encoding a modified amino acid having at least one deletion, substitution or alteration, said variant polynucleotide being suitable for use in accelerating the biosynthesis of ML-236B.
- 2. A polynucleotide according to claim 1 comprising SEQ ID NO 37, or comprising a mutant or variant thereof, suitable for use in accelerating the biosynthesis of ML-236B.
- 3. A polynucleotide according to claim 1, comprising SEQ ID NO 37.
- 4. A polynucleotide according to claim 1 comprising DNA obtainable from transformed *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005).
- 5. A polynucleotide according to claim 1 comprising SEQ ID NO 41, or comprising a variant thereof, suitable for use in accelerating the biosynthesis of ML-236B.
- 6. A polynucleotide according to claim 1, comprising SEQ ID NO 41.
- 7. A polynucleotide according to Claim 1 comprising DNA obtainable from transformed *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).

- 8. A polynucleotide according to claim 1 in operative combination with one or more polynucleotides, said combination being suitable for use in enhancing the production of ML236B in an ML-236B producing micro-organism.
- 9. A polynucleotide according to claim 3 in operative combination with one or more polynucleotides, said combination being suitable for use in enhancing the production of ML236B in an ML-236B producing micro-organism.
- 10. A polynucleotide according to claim 4 in operative combination with one or more polynucleotides, said combination being suitable for use in enhancing the production of ML236B in an ML-236B producing micro-organism.
- 11. A polynucleotide according to claim 6 in operative combination with one or more polynucleotides, said combination being suitable for use in enhancing the production of ML236B in an ML-236B producing micro-organism.
- 12. A polynucleotide according to claim 7 in operative combination with one or more polynucleotides, said combination being suitable for use in enhancing the production of ML236B in an ML-236B producing micro-organism.
- 13. A polynucleotide according to claim 8 comprising the polynucleotide of SEQ ID NO 37, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 14. A polynucleotide according to claim 9 comprising the polynucleotide of SEQ ID NO 37, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 15. A polynucleotide according to claim 10 comprising the polynucleotide of SEQ 1D NO 37, or variant thereof having similar function, in combination with one or more sequences selected from SEQ 1D NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.

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- 16. A polynucleotide according to claim 11 comprising the polynucleotide of SEQ ID NO 37, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 17. A polynucleotide according to claim 12 comprising the polynucleotide of SEQ ID NO 37, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 18. A polynucleotide according to claim 8 comprising the polynucleotide of SEQ ID NO 41, or variant thereof having similar function. in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 19. A polynucleotide according to claim 9 comprising the polynucleotide of SEQ ID NO 41, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 20. A polynucleotide according to claim 10 comprising the polynucleotide of SEQ ID NO 41, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- A polynucleotide according to claim 11 comprising the polynucleotide of SEQ ID NO 41, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof having similar function.
- 22. A polynucleotide according to claim 12 comprising the polynucleotide of SEQ ID NO 41, or variant thereof having similar function, in combination with one or more sequences selected from SEQ ID NO 37, 41, 43, 45, 47 or 49, or variant thereof

having similar function.

- 23. A polynucleotide capable of hybridizing under stringent conditions with a polynucleotide according to any preceding claim.
- 24. A polynucleotide according to claim 23 that is suitable for accelerating the biosynthesis of ML-236B in an ML-236B producing micro-organism when introduced in the ML-236B producing micro-organism.
- 25. A polynucleotide according to claim 23 or 24 which is RNA.
- 26. A vector comprising a polynucleotide according to any preceding claim.
- 27. A vector according to claim 26 obtainable from *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005) or *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).
- 28. A vector according to claim 26 or 27 which is an expression vector.
- 29. A host cell transformed by a vector according to any of claims 26 to 28.
- 30. A host cell according to claim 29 characterized in that it is an ML-236B producing micro-organism.
- 31. A host cell according to claim 30 characterized in that it is *Penicillium citrinum*.
- 32. A host cell according to claim 29 characterized in that it is Escherichia coli.
- 33. A host cell according to claim 32 characterized in that it is *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005).
- 34. A host cell according to claim 32 characterized in that it is *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).

- 35. A polypeptide encoded by a polynucleotide according to any of claims 1 to 25.
- 36. A polypeptide comprising the sequence of SEQ ID NO 38, or a variant thereof which has at least 80% identity to SEQ ID NO 38 and which is capable of accelerating ML236B production in an ML236B producing organism.
- 37. A polypeptide according to claim 36, having the sequence of SEQ 1D NO 38.
- 38. A polypeptide comprising the sequence of SEQ ID NO 42, or a variant thereof which has at least 80% identity with SEQ ID NO 42 and which is capable of accelerating ML236B production in an ML236B producing organism.
- 39. A polypeptide according to claim 38, having the sequence of SEQ ID NO 42.
- 40. A method for producing ML-236B. comprising culturing a host cell according to any of claims 29 to 31 and then recovering ML-236B from the culture.
- 41. A method according to claim 40, wherein the host cell is transformed with a vector comprising SEQ ID NO 37 or SEQ ID NO 41.
- 42. A method according to claim 41, wherein the vector comprises no additional genes.
- 43. A method according to any of claims 40 to 42, wherein production occurs in the absence of recombinant *mlc*A, B, C or D corresponding to SEQ ID NO 44, 46, 48 or 50.
- 44. ML-236B produced by the method of any of claims 40 to 43.
- 45. A method of manufacturing pravastatin, which comprises carrying out a method according to any of claims 40 to 43, and converting the ML-236B to pravastatin.

- 46. An antibody reactive with the protein of SEQ ID NO 38 or SEQ ID NO 42.
- 47. A polynucleotide encoding a protein having the amino acid sequence selected from SEQ ID NO 44, 46, 48 or 50 or a variant polynucleotide encoding a modification of said amino acid sequence having a deletion, substitution, addition or alteration, said variant being suitable for use in accelerating the biosynthesis of ML-236B.
- 48. A polynucleotide according to claim 47 selected from the group consisting of SEQ ID NO 43, 45, 47 or 49.
- 49. A polynucleotide according to claim 47 or 48, said polynucleotide being capable of accelerating the biosynthesis of ML-236B alone or in conjunction with the polynucleotide of SEQ ID NO 37 or SEQ ID NO 41.
- 50. A vector comprising a polynucleotide according to any of claims 47 to 49.
- 51. A host cell comprising a vector according to claim 50.
- 52. A polypeptide encoded by a polynucleotide according to any of claims 47 to
- 49.
- 53. A method for the production of ML236B comprising culturing a host cell according to claim 51 and then recovering ML-236B from the culture.